

circuit breaker VL160X N standard breaking capacity I<sub>cu</sub>=55kA, 415V AC 3-pole, non-auto. air circ. br. Electronic Trip Unit magnetic I<sub>n</sub>=160A, rated current I<sub>I</sub>=1800A, short-circuit prot. without auxiliary release without auxiliary/alarm switch

Model	
type of the driving mechanism motor drive	No
design of the overcurrent release	M
General technical data	
number of poles	3
size of the circuit-breaker	3VL1
mechanical service life (operating cycles) typical	20 000
electrical endurance (operating cycles) typical	10 000
utilization category	A
performance class for circuit breaker	N
reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750	Q
operating frequency maximum	120 1/s
Voltage	
Rated operational voltage U <sub>e</sub> max.	690 V
<ul style="list-style-type: none"> <li>insulation voltage rated value</li> <li>insulation voltage (U<sub>i</sub>) at AC rated value</li> </ul>	800 V
surge voltage resistance rated value	8 kV
operating voltage <ul style="list-style-type: none"> <li>rated value maximum</li> <li>for main current circuit at AC at 50 Hz maximum</li> <li>for main current circuit at AC at 60 Hz maximum</li> <li>for main current circuit at DC maximum</li> </ul>	690 V 690 V 690 V 500 V
Protection class	
protection class IP	IP20
protection function of the overcurrent release	I
Main circuit	
operating frequency <ul style="list-style-type: none"> <li>1 rated value</li> <li>2 rated value</li> </ul>	50 Hz 60 Hz
Auxiliary circuit	
number of CO contacts for auxiliary contacts	0
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
Suitability	
suitability for use	non-automatic circuit-breakers
Product details	
product component <ul style="list-style-type: none"> <li>trip indicator</li> <li>auxiliary switch</li> <li>voltage trigger</li> <li>undervoltage release</li> <li>undervoltage release with leading contact</li> </ul>	No No No No No
product extension optional motor drive	Yes
Product function	
product function <ul style="list-style-type: none"> <li>of thermal overload trip unit</li> <li>grounding protection</li> <li>for neutral conductors short-circuit and overload proof</li> </ul>	without No No

• overload protection	No
<b>Short circuit</b>	
operating short-circuit current breaking capacity (Ics)	
• at 240 V rated value	65 kA
• at 415 V rated value	55 kA
• at 500 V rated value	14 kA
• at 690 V rated value	4 kA
maximum short-circuit current breaking capacity (Icu)	
• at 240 V rated value	65 kA
• at 415 V rated value	55 kA
• at 440 V rated value	25 kA
• at 480 V according to NEMA rated value	25 kA
• at 500 V rated value	18 kA
• at 600 V according to NEMA rated value	8 kA
• at 690 V rated value	8 kA
<b>Connections</b>	
arrangement of electrical connectors for main current circuit	front side
type of connectable conductor cross-sections for main contacts	
• with flexible busbar	12 x 10 mm
• solid	2.5 ... 95 mm <sup>2</sup>
• finely stranded with core end processing	2.5 ... 50 mm <sup>2</sup>
• stranded	2.5 ... 95 mm <sup>2</sup>
type of connectable conductor cross-sections for auxiliary contacts	
• solid	0.75 ... 1.5 mm <sup>2</sup>
• finely stranded with core end processing	0,75 ... 1.0 mm <sup>2</sup>
type of electrical connection for main current circuit	box terminal
<b>Mechanical Design</b>	
height	157.5 mm
width	104.5 mm
depth	106.5 mm
fastening method	fixed mounting
<b>Environmental conditions</b>	
ambient temperature during operation	
• minimum	0 °C
• maximum	70 °C
ambient temperature during storage	
• minimum	-40 °C
• maximum	80 °C
<b>Approvals Certificates</b>	
<b>General Product Approval</b>	

[Confirmation](#)



EMV	Test Certificates	Marine / Shipping
	<a href="#">KC</a>	<a href="#">Special Test Certificate</a>
		<a href="#">Type Test Certificates/Test Report</a>
		
		
<b>other</b>		
<a href="#">Confirmation</a>		

## Further information

### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

### Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/lowvoltage/catalogs>

### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VL1716-1DE33-0AA0>

### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3VL1716-1DE33-0AA0>

### Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL1716-1DE33-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL1716-1DE33-0AA0)

### CAx-Online-Generator

<http://www.siemens.com/cax>

### Tender specifications

<http://www.siemens.com/specifications>

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